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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,609	08/22/2003	Allen C. Buhler	BUTR-101US	9808
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JANSSON SHUPE & MUNGER LTD. 245 MAIN STREET RACINE, WI 53403			EXAMINER	
			CHAWLA, JYOTI	
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/646,609	BUHLER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jyoti Chawla	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 December 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 2-30 and 45-59 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 2-30 and 45-59 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 26, 2006 has been entered. Claims 2-4, 11, 17, 26-29, 45, 49 and 59 have been amended, and claims 2-4, 6-30 and 45-59 are pending and examined in the application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.

Ascertaining the differences between the prior art and the claims at issue.

Resolving the level of ordinary skill in the pertinent art.

Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

(A) Claims 2-4,6-10,12-15, 18-19, 23-24, 26-27, 29, 45- 57 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch (US 5759609) in view of the combination of Gonsalves et al (U.S. 6372280) and Solms-Baruth et al (U.S. Pat. No. 3,763,900).

Regarding claims 26, 45, 48, 49 and 57, Lynch discloses a low calorie butter-flavored composition comprising from 35% to about 60% water (Column 1 lines 59-60, claim 1), corn syrup from about 15% to about 20% (Column 4 lines 8-10), it is well known in the art that corn syrup is a starch hydrosylate product or a bulking agent, milk powder and proteins from 0% to 10% (Column 6 lines 26-27), emulsifiers at a range from 0.05 to about 5% (Column 4 lines 64-67) and flavoring at less than 1% as in claims 48 and 57 (see table 1). The reference also teaches of butter flavor (Column 5, lines 55-60). However, Lynch teaches a fat content of 0-7% (Abstract and Column 4, line 27 to column 5, line 46). Thus the reference teaches the amounts of emulsifier and flavor would be sufficient to perform their primary functions as recited in claim 49. The reference does not teach fat in the recited range of 13-16% as instantly claimed. Gonsalves et al., hereinafter Gonsalves, teaches of stable foams such as whipped topping having a fat content from about 5% to about 20% (Column 5 lines 55-56). Thus food toppings with higher amount of fat were known in the art at the time of the invention (Gonsalves). The increase in amount of fat, increases the calorific value of the topping and makes the topping richer in texture. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lynch based on the teaching of Gonsalves and utilize more fat in making the topping in order to make the product more calorie dense. One would have been further motivated to add more fat in order to provide a slightly higher fat topping which is more flavorful and has a high satiety value to the consumer.

Regarding claims 2, 27, 29, and 59, Lynch does not teach packaging a flavored topping in aerosol container or a pressurized container. the pressurized containers were well known in the art at the time of the invention. Thus one of ordinary skill would be motivated to look to the art for an example of whipped topping dispensed from a pressurized container. However, Solms-Baruth et al teach an aerosol container filled with a sprayable or foamable product such as whipped cream in order to for the products to possess a long period of safe storage (abstract, Col 4 lines 16-20, lines 43-45). It is well known in the art to utilize aerosol or pressurized cans to dispense milk products to form foams and it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the foaming device as taught by Solms-Baruth in order to dispense a foamy milk product as instantly claimed.

Regarding claims 2 and 59, Lynch does not teach the stability of the topping at room temperature and the pressurized container for dispensing the topping as recited in claim 59. The reference teaches of stabilizers and emulsifiers in the range recited by the applicant. Thus the product as taught by Lynch will be expected to have similar stability as that of the instantly claimed product, absent any clear and convincing evidence and /or arguments to the contrary.

Regarding claim 3, Lynch failed to disclose an aerosol container. Solms-Baruth teaches using an aerosol container to package milk products such as toppings. The Office does not have the capability to distinguish between the operation of the prior art's can and the instantly claimed container. It would be obvious to one of ordinary skill in the art to expect that the operation of both containers would allow removal of over 90% of the product as instantly claimed because they both utilize the same pressurizing agent and dispense the same type of product, absent any clear and convincing evidence and /or arguments to the contrary.

Regarding claim 4, Lynch does not disclose the pressurizing agent. However, Solms-Baruth teach that for foodstuffs nitrous oxide is particularly suitable because of its

neutral taste and its relative physiological inoffensiveness (Col 3 lines 2-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lynch with the teachings of Solms-Baruth and utilize nitrous oxide to pressurize the container in order to obtain a pressurized topping without any offensive odor or taste alteration.

Regarding claims 12-13, see the rejection of claim 48 above.

Regarding claim 46, Lynch teaches of a product with an overrun of between 300 and 500, which encompasses applicant's recited range (Column 2 lines 41-43).

Regarding claims 47 and 51, Lynch discloses suitable emulsifiers including lecithin, mono, di glycerides of fatty acids, etc (Column 5 lines 3-20).

Regarding claims 9, 10 and 50, Lynch discloses coconut fat as a suitable fat (Column 4 lines 27-30) as instantly claimed. Regarding claim 10, Lynch discloses suitable fats in preparing whipped toppings including coconut fat (Col 4 lines 27-32). However, Lynch failed to disclose the melting point of the coconut fat. However since coconut fat is the same ingredient the melting point of the coconut fat as taught by Lynch would be that same as instantly claimed.

Regarding claim 52, Lynch discloses emulsifiers at a range from 0.05% to about 5% (Column 4 lines 64-67) which includes the instantly claimed range.

Regarding claims 7, 18 and 53, Lynch discloses the presence of corn syrup from about 15% to about 20% (Column 4 lines 8-10), it is well known in the art that corn syrup is a product obtained by the hydrolysis of corn starch, i.e. starch hydrosylate.

Regarding claims 8, 19 and 54, Lynch discloses that corn syrup with a dextrose equivalent of about 15 to about 65 is used as a sweetener, which is about 10. In addition the reference also teaches that the DE or dextrose equivalence of the corn syrup may be varied to provide varying levels of sweetness to meet the requirements of

the end use of the product (Column 3, line 57 to Column 4, line 26). Thus corn syrup and corn products like dextrins were known in the art at the time of the invention. Further, it was also known that the DE of corn syrup can be varied based on the sweetness desired and also based on the end use of the product (Lynch). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify Lynch and reduce the DE value of the corn based product in order to adjust the consistency and the sweetness level desired in the finished product and make a less sweet finished product, which is also the intent of the applicant. Such modification in sweetness of the topping composition would not impart patentable distinction to the claims absent any clear and convincing evidence and /or arguments to the contrary.

Regarding claims 14-15 and 23-24, Lynch discloses that a wide variety of emulsifiers could be utilized from about 0.05% to about 5% (Col 4 lines 64-67), non-ionic lipophilic and hydrophilic emulsifiers at less than 1%, lecithin at a range from 0.01% to 0.25%, microcrystalline cellulose at a range from 0% to 2% (Col 5 lines 22-25, lines 33-59), salt at a range from 0% to 5% (Col 6 lines 44-47) and colorants (Col 6 lines 52-55). However, Lynch failed to disclose the amount for the colorant. It would be obvious to one of ordinary skill in the art at the time of the invention to modify the amount of the colorant in order to either lighten or to intensify the color of the product. One would be motivated to do so in order to make toppings in various colors and also combination of colors.

Regarding claim 55, Lynch teaches of proteins from 0 to 10% (Column 6 lines 25-27), which includes the instantly claimed range of 1-5%.

Regarding claims 6 and 56, Lynch teaches that soy protein preparations, such as, soy concentrates or soy isolates can also be added to the topping composition in order to increase the protein content of the topping. The reference also teaches that any soy protein that has good solubility can be used in the topping (Column 6, lines 20-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to select the soy protein to be included in the topping composition based on the availability, cost and solubility of the soy protein desired. One would have been further motivated to add soy based protein to the topping composition in order to either reduce or replace the milk based protein in order to increase the vegetable protein content of the topping composition.

(B) Claims 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch in view of the combination of Gonsalves and Solms-Baruth as applied to claims 2-4,6-9,12-15, 18-19, 23-24, 26-27, 29, 45- 57 and 59 above , further in view of Kocher (U.S 2831775).

Lynch in view of the combination of Gonsalves and Solms-Baruth has been applied to 2-4,6-9,12-15, 18-19, 23-24, 26-27, 29, 45- 57 and 59 above.

Regarding claims 16 and 25, Lynch discloses microcrystalline cellulose as a suitable stabilizer (Col 5 lines 47-54), a non-ionic lipophilic emulsifier such as glyceryl monostearate, sorbitan stearate, etc (Col 5 lines 24-25), a non-ionic hydrophilic emulsifier such as polysorbate 60 (Col 5 lines 25-26) and mono and diglycerides (Col 5 line16). However, Lynch failed to disclose annatto as a colorant. Kocher teaches an edible annatto coloring composition for coloring food products such as dairy, milk, ice cream etc (Col 1 lines 15-20). Annato as food coloring was well known at the time of the invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the annatto colorant taught by Kocher as a colorant in order to give the topping a characteristic orange yellow color.

(C) Claims 11, 20 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch in view of Gonsalves, as applied to claims 2-4,6-9,12-15, 18-19, 23-24, 26-27, 29, 45- 57 and 59 above, further in view of the combination of

Viktorovna (RU 2180177 , English Abstract only), Pickenhagen et al (U.S. Pat. No. 6,025,005).

Lynch in view of the combination of Gonsalves and Solms-Baruth has been applied to 2-4,6-9,12-15, 18-19, 23-24, 26-27, 29, 45- 57 and 59 above.

Regarding claims 11, 20 and 58, Lynch teaches of butter flavor as one of the flavor, however the reference does not teach the composition as recited in claim 58. The flavor compositions taught by Victorovna comprises of maltol, acetoin, diacetyl, gamma-nonalactone, butyric acid, caproic acid, and lactic acid at lower wt% (abstract). However, Viktorovna failed to show propylene glycol. Propylene glycol was known as a vehicle or carrier for flavor compositions. Thus one of ordinary skill would have been motivated to look to the art to find uses of propylene glycol in a flavoring composition. Pickenhagen et al., hereinafter Pickenhagen, teaches of flavor substances comprising propylene glycol (see example 4) where it is utilized as a solvent. It would be obvious to one of ordinary skill in the art to utilize the teachings of Viktorovna and Pickhagen and modify Lynch in order to provide a flavor composition of the invention. The respective amounts of the components in the flavor composition as recited are seen as an experimental result variable that can be adjusted based on batch size, flavor and acidity required. Regarding

(D) Claims 17, 21-22 , 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch in view of the combination of Gonsalves and Solms-Baruth as applied to claims 2-4,6-9,12-15, 18-19, 23-24, 26-27, 29, 45- 57 and 59 above , further in view of the combination of Dell et al (U.S. Pat. No. 4,251,560) and Musser (U.S. Pat. No. 2,883,286).

Lynch in view of the combination of Gonsalves and Solms-Baruth has been applied to 2-4,6-9,12-15, 18-19, 23-24, 26-27, 29, 45- 57 and 59 above.

Regarding claims 17 and 21, Lynch disclose corn syrup from about 15% to about 20% (Col 4 lines 8-10), it is well known in the art that corn syrup is a starch hydrosylate and

flavoring at less than 1% (see table 1). Lynch failed to disclose whole milk and heavy cream. However, Dell et al teach a cream containing whipped topping composition containing heavy cream at 62.5% (see Col 5 lines 20-24). Musser teaches a foam topping containing whole milk from 35 to 45% (Col 1 line 49). These ranges are within applicant's recited range. Therefore, it would be obvious to one of ordinary skill in the art to modify Lynch by incorporating the ingredients taught by Dell et al and Musser in order to provide a product with attributes such as improved texture and mouth feel that is appealing to the consumer.

Regarding claim 22, Lynch does not disclose the ingredients and wt% as recited. However, Dell and Musser do teach the ingredients in the topping composition. Thus to vary the amounts of the components , such as, milk, cream and bulking agent would be a matter of preference. One of ordinary skill in the art at the time of the invention would be apprised of the various combinations of the ingredients in order to produce the desired consistency topping, e.g., more bulking agent is added if thicker topping is desired and more milk or cream if the topping need to be more spread able. Therefore, it would be obvious to one of ordinary skill in the art to combine these ingredients to give a topping composition depending on the texture, mouth feel and other attributes desired by the consumer.

Regarding claim 28, Lynch disclose corn syrup from about 15% to about 20% (Col 4 lines 8-10), it is well known in the art that corn syrup is a starch hydrosylate and flavoring at less than 1% (see table 1) and having an overrun between 300 and 500% (abstract). Lynch failed to disclose whole milk and heavy cream. However, Dell et al teach a whipped topping composition containing heavy cream at 62.5% (see Col 5 lines 20-24). Musser teaches a foam topping containing whole milk from 35 to 45% (Col 1 line 49) as instantly claimed. Therefore, it would be obvious to one of ordinary skill in the art to modify Lynch by incorporating the ingredients taught by Dell et al and Musser in order to provide a product with attributes such as improved texture and mouth feel that is appealing to the consumer.

Regarding claim 30, Lynch failed to show the fat content of the heavy cream and whole milk. However, Dell et al teach a whipped topping composition containing heavy cream

at 62.5% having a fat content of 40% (see Col 5 lines 20-24). It is well known that whole milk has the full milk fat content of between 3-4%. It would have been obvious to one of ordinary skill in the art to utilize the heavy cream taught by Dell having a fat content of 40% which is about 38% as recited by applicant in order to provide a product with attributes such as improved texture and mouth feel that is appealing to the consumer.

### ***Response to Arguments***

Applicant's arguments filed 12/26/2006 have been fully considered but they are moot in view of the new ground(s) of rejection.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the missing elements not disclosed by the primary reference Lynch are taught by the applied secondary references.

Applicant argues that Lynch is directed to a dairy free product; however, Lynch discloses the presence of milk powder as a protein source in the composition (Column 6 line 26). Applicant also states that Lynch requires a high sweetener content at 30-55% wt-%, however, Lynch discloses that the sweeteners used in the invention are high fructose corn syrup, corn syrup with a dextrose equivalent of about 15 to about 65 (Column 3 lines 64-66). In addition he discloses that the ratio of the various sweeteners can be varied to provide varying levels of sweetness to meet the requirements of the

end use of the product (Column 4 lines 1-4). The amount of corn syrup is from about 15% to about 20%, which encompasses applicant's recited range.

Applicant argues that the reference Solms-Baruth does not teach or suggest applicant's composition as claimed. However, the reference is used to show that it is well known to utilize aerosol containers for whipped compositions in order for the products to possess a long period of safe storage (abstract, Column 4 lines 16-20, lines 43-45).

Applicant argues that the combination of Lynch and Gonsalves is improper because of the fat content disclosed by Lynch. However, Gonsalves teaches a fat content of about 5 to about 20%, which encompasses Lynch's disclosed range. Applicant can rebut a *prima facie* case of obviousness based on overlapping ranges by showing the criticality of the claimed range. "The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. In such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant argues that Gonsalves is directed to a fruit-type acidic whipped topping and that Lynch includes no such emulsion and acidic component. However, these limitations are not claimed in the instant invention and besides Lynch's composition is an emulsion and mentions the presence of fruit flavors in the composition. Applicant also argues the presence of whey protein in Gonsalves and not in Lynch, again this limitation is not presently claimed, besides Lynch mentions that food proteins could be added.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jyoti Chawla  
Examiner  
Art Unit 1761

  
KEITH HENDRICKS  
PRIMARY EXAMINER